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40

MILITARY HISTORY SECTION

The Preparation and Use of Strategic Reserves in the Second World War

by

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The experience of all warfare, and in particular the direct experience of the Russian army in the First World War and of the Soviet Army in the civil war in the USSR, has convincingly demonstrated the significance of reserves. For this reason, in the period preceding the Second World War, Soviet military-theoretical thought devoted much attention to working out the problem of the creation and use of strategic reserves.

According to the views existing before the war, the High Command Reserves (RGK - Rezerv Glavnogo Komandovaniya) consisted of: that part of the nation's armed forces directly under the orders of the High Command, and specialized units (artillery, tank, chemical, engineer, etc.) not an organic part of combined-arms large units, but intended for the reinforcement of the latter depending on the operational and tactical missions being fulfilled by them.

In the pre-war years a great deal of work was done in our country on the creation of strategic reserves. This was reflected in the practical measures adopted by the Soviet command on the eve of the war. The existing estimates for strategic deployment of our armed forces called for the creation of five armies in the High Command Reserve - the 16th, 19th, 22nd, 24th, and 28th. The 16th and 19th Armies were destined for the south-western axis and the 22nd for the western, and the 24th and 28th were to constitute the central reserve of the High Command, located northwest and southwest of Moscow. Just before the war the 21st Army was formed, and at the very beginning of the war - the 20th Army, which were also included in the High Command Reserve. Thus, at the very beginning of the war there were eight armies under the direct orders of the High Command, consisting

of 77 divisions (58 rifle, 13 tank, and 6 motorized). To be sure, the combat effectiveness of these troops was rather low - the rifle divisions were at their cut-back peacetime strength, while most of the tank and motorized divisions of the mechanized corps had still not completed their formation, had few tanks and little artillery, and were weakly knit.

One very important circumstance should be emphasized. Just before the beginning of the war, the Politburo of the Central Committee of the All-Union Communist Party (Bolshevik) reached the decision to unite the armies of the High Command Reserve under a single command. On 25 June this decision was put into a directive of the People's Commissariat of Defense, creating a group of armies under the command of Marshal of the Soviet Union S. M. Budennyy. Thus, at the very start of the war a powerful formation of strategic reserves had already been created, which was not organically committed to a front.

In comparison we should point out that the reserve of the German-Fascist command had only 24 divisions, of which 12 were designated for army groups "North", "Center", and "South".

Our situation with regard to the specially formed units (formirovaniye) of the RGK on the eve of the war was considerably worse. The artillery of the High Command Reserve was very small in number, even though the experience of the First World War had shown that the RGK must have strong artillery. At the start of the Second World War we had in the RGK 14 gun regiments, 60 howitzer regiments, 15 separate battalions, and 2 separate batteries. They numbered 4326 artillery pieces, or about 5 percent of the over-all number of such weapons in the Soviet Army. Howitzer systems predominated in the artillery of the RGK and were intended for ensuring the breach of the enemy's defense, but gun artillery was in short supply and antiaircraft artillery was completely lacking. As for the antitank artillery of the RGK, it was only just before the war (in May 1941) that the formation was begun of ten antitank brigades (with two regiments in each). The engineer units of the RGK consisted of 18 engineer regiments,

16 pontoon-bridging regiments, 3 separate battalions, and one company. These units were far below strength and were very poorly supplied with engineer equipment. Tank and aviation units and large units were completely absent from the High Command Reserve.

In contrast to the combined-arms formations, which were under the direct orders of the High Command, the specially formed units of the RGK were transferred as reinforcement for the troops in the military districts. The distribution of the existing artillery and engineer units of the RGK at the beginning of the war represented, on the whole, a situation in which the overwhelming mass of them were in the Baltic, Western, and Kiev Border Districts.

Once the war began, it introduced great changes both in the preparation of the strategic reserves and in the preliminary plans for their use. These can be seen in the following:

--the troops of the border districts were unable to perform the task assigned to them - to repel the enemy attack, to halt his advance, and to create the conditions for our armed forces to go over to the offensive. For this reason it was necessary to use the existing strategic reserves, not for a joint offensive with the troops of the western border districts, as had been planned, but for defense;

--in the first days of the war it became clear that the enemy had concentrated his main efforts on the western axis, where a very difficult situation was created for our troops. All the strategic reserves were therefore redirected onto this axis. This required, specifically, the rapid transfer to the western axis of the 16th and 19th Armies, which had earlier been moved into the Ukraine;

--by the end of June 1941 it was already clear that the Western Front was in no condition to perform its tasks with the forces which it had left. Therefore, the 16th, 19th, 20th, 21st, and 22nd Armies

were incorporated into this front, which brought about the liquidation of the army group of the High Command Reserve. Consequently, already at the beginning of July, the High Command had under its orders only two armies (the 24th and the 28th), which had been moved up to the line Nelidovo-Yelnya-Zhukovka;

--at the very beginning of the war the serious shortage of artillery and engineer units under the RGK began to be felt, and the lack of tank and aircraft reserves of General Headquarters (Stavka) greatly complicated the conduct of armed combat.

The Soviet command was presented with an exceptionally complex task - the rapid preparation of strategic reserves, but such methods of creating them as drawing them from the formations and large units of the army in the field, or transferring a large number of troops from the Far Eastern, Central Asian, or Transcaucasus Military Districts were practically out of the question.

Under these conditions the only solution was to create strategic reserves out of newly formed units, but this involved great difficulties. The fact was that the buildup of our armed forces in accordance with the mobilization plans which existed on the eve of the war had already been completed. Further buildup had not been foreseen by any pre-war plans, and consequently a reserve of officer personnel and stockpiles of arms and combat equipment for these purposes had not been created. In addition, the enemy's seizure of important industrial areas and the necessity to evacuate industry to the east considerably reduced our capabilities for producing combat equipment and arms.

The solution of so vast and incredibly difficult a task was within the power only of the Soviet State and our people, as led by the experienced Communist Party.

First of all, the large-scale buildup of rifle troops was begun. On 29 June 1941 the decision had already been taken for the supplementary formation of 15 rifle divisions; on 8 July there followed a decision to form 56 rifle divisions and 25 divisions of people's militia (narodnoye opolcheniye) and on 19 August, still another 85 rifle divisions. The formation also began of a large number of cavalry large units (from July to November 1941, 64 cavalry divisions were formed). The establishment of new army commands took place simultaneously. From 1 July to 5 December 1941, 25 commands of combined-arms armies were newly created in the General Headquarters reserve and 16 armies directly within fronts. To be sure, in this same period, however, 15 army commands were disbanded.

In connection with the growing need for command personnel, urgent measures were adopted for their training: the system of training institutions and courses was broadened and the number of those in training was increased. But these could produce results only in the future. Meanwhile, for the immediate satisfaction of the need for command personnel it was decided to disband the rifle corps commands. To fulfil the need for combat equipment and arms, literally all possibilities were used, including the issuance to the troops of obsolete models.

Quite naturally, the buildup of a large number of formations and large units in a short period could not help but reflect on their quality. Many large units were dispatched to the front inadequately organized and armed. Because of the need for the rapid commitment of large units to the army in the field, a considerable number of rifle and ski brigades were created.

The war demonstrated that infantry on the defensive, and even more on the offensive, was in need of tanks designated for its direct support(NPP). But, there were no such tanks, either within the rifle large units or in the separate tank units of the RGK. In connection with this, the formation was begun of separate tank brigades and battalions of the RGK. As for the mechanized corps, they were liquidated in July

For the support of army missiles, in an army, besides the ground means of reconnaissance, there should be means for air reconnaissance, including aircraft, helicopters and pilotless means. In a front, in addition to reconnaissance and artillery-fire-direction aircraft, it is necessary to have pilotless means of reconnaissance.

The need for specially trained air reconnaissance subunits under (v rukakh) the commander of the missile troops and artillery of a front (army), with apparatus for the determination of the coordinates of targets, is confirmed by the experience of exercises. On one of these, for example, 66 objectives were reconnoitered by the forces of a front; but their coordinates, which only artillery-fire-direction aircraft could provide, were determined for only 16 objectives.

For a fundamental solution of the questions of combat with the nuclear means of the enemy, it is necessary to provide the commanders of missile troops and artillery of a front and an army and also the divisional level with reliable means for reconnaissance and destruction. We should note, incidentally, that during World War II all the necessary means for reconnaissance and destruction were under the orders of the artillery commander and that, thanks to this, counter-battery combat was of a continuous nature.

As has been pointed out above, various forces and means, from the complement of all arms of troops, will be brought in to the combat with the nuclear means of the enemy. The effective use of all these means is inconceivable without well-organized, operational and efficiently functioning control at all levels, beginning from the planning and ending with the actual assignment of missions to the means of reconnaissance and destruction, and also checking on their timely completion. The responsibility for organizing combat with nuclear means rests with the commander of the troops of a front (army), and the commander of a division.

Control of the means of destruction in a front or in an army is carried out in accordance with the plan of combat against the enemy's nuclear weapons. This plan is worked out under the direction of the chief of staff of the front (army) by the operations and reconnaissance directorates (departments), together with the staffs of the missile troops and artillery and of the air army. In the plan the following questions should be reflected:

-the grouping of the enemy troops, especially of his nuclear means;

-the limit of ammunition with nuclear, chemical and conventional fillers planned for use in combat with the enemy's nuclear means and their distribution by tasks (days) of an operation and by armies;

-the limit of the flying resources of the aviation and their distribution;

-the position of the reconnaissance units and subunits and of the means of destruction brought in for combat with the enemy's nuclear means;

-tasks of the combat with the enemy's nuclear means which are entrusted to a front, to an army and to a division;

-the distribution of these tasks between the different means for reconnaissance and destruction;

-the arrangement for the movement of means during the course of the operation;

-the tasks of the combined arms (especially tank) large units and formations in the destruction of the means of nuclear attack and in the disruption of the basing of nuclear weapons along the axis of the main strike;

-the organization of control of the means which have been brought in (the organization of communications, signals, call signs,etc).

The plan may be represented graphically on a map or written.

It is quite clear that combat with the enemy's nuclear means must be waged continuously both in the preparatory period of an operation, and while it is being conducted. However, the most vigorous operations of the main mass of means for reconnaissance and destruction, will clearly be timed for certain moments of the operation, when the most crucial tasks are being performed, such as the commitment to battle of the second echelons, the repulse of counter-attacks, the forcing of water obstacles etc.

The plan for radio counter-measures evolved by the operations directorate should be drawn up with regard to the requirements for combat with the enemy's nuclear means. Support for this combat must be planned and carried out in the first instance.

The movement of the whole complex of means during the course of an operation must be planned on such a basis as to ensure the constant readiness of the latter to perform tasks at any time of the day or night and under any circumstances.

The commander of the missile troops and artillery of a front must be the principal organizer of the employment of the missile troops of the front in combat with the enemy's nuclear means. On the basis of the plan drawn up by the staff of the front, he, with his staff, works out all the questions connected with the organization of the combat of the front's missile troops with the enemy's nuclear means, reflecting them in an appropriate plan.

The role of the commander and staff of the missile troops and artillery in the planning and organization of the operations of duty missile subunits, whose basic function is the destruction of the enemy's nuclear means, is especially important. As is generally known, the duty missile batteries,

which are on launch sites, in a state of readiness to deliver a strike in relatively short periods, namely the duty batteries under the command of the commander of missile troops and artillery, are the means with whose help the latter can most quickly deliver strikes against objectives which have been exposed.

In planning the operations of the duty batteries, the commander of the missile troops and artillery of a front (army) determines their number, the units and subunits, from which they should be detached, the number of nuclear warheads, and the procedure for their preparation and supply, the organization of communications, etc.

The commander of the artillery of a division must plan, in detail, the use of a battalion of tactical missiles and tube artillery, both for combat with the enemy's tactical nuclear weapons, and for combat with his artillery as a whole.

At the present time, when an army operates in a wide zone and its divisions carry on combat operations at a considerable distance from one another, combat with tactical nuclear means and artillery can most successfully be performed only in the divisions. This is why a division must be provided with a sufficient quantity of artillery, especially with long-range artillery, and also with reconnaissance means, which were discussed above.

An army and a front, with the missile units, as we already said, will carry on the combat with the enemy's nuclear means which are disposed in the rear and will also supplement the fire of battalions of tactical missiles and of divisional artillery against tactical weapons. In conformity with this, the functions of the commanders of the missile troops and artillery of a front and of an army and of the commander of the artillery of a division are determined. They must respond operationally exclusively to the incoming data on enemy nuclear means which have been exposed, make decisions and quickly give the necessary commands to open fire.

The system for the control of the means of reconnaissance, of the missile troops and artillery, under the commander of missile troops and artillery must be similar to the control systems set up in the anti-air defense troops.

At the command posts of the commanders of missile troops and artillery, reconnaissance data should be quickly plotted on a fire control map or on an appropriate artillery board and the command to open fire should be transmitted automatically, spending only several seconds in all on this.

The command posts of commanders of missile troops and artillery of missile brigades, battalions and batteries should be equipped with electronic computers and with different calculators and the means of communications between them must provide dependable, fast and enciphered transmission of information and commands. Unfortunately, for the moment there are no such means.

In order to be ready to carry out the tasks of combat with the enemy's nuclear means, already, today, the staffs of the commanders of missile troops and artillery must be in a position to set up two fire control groups, with a number of well-prepared and trained officers. Control groups should be supplied with well-equipped mobile command posts, provided with all the necessary instruments, appliances, selective communications, and other means of light automation.

In order that the appropriate instructions and commands for the destruction of objectives may pass without obstruction, it is essential that a special channel of communications should be allocated between staffs of a front, an army, and a division, and also that measures necessary for the granting of special priorities in the use of all lines of communications should be envisaged, up to the automatic disconnection of any subscribers and the clearing of a channel of communications for the time of the transmission of a command. Channels of communications must be dependably paralleled by different means of communications assigned for the direction of the fire of the missile troops of a front, an army, and a division.

It is necessary to determine in detail the operating procedure at all levels of the system for control of the means of combat with the enemy's nuclear weapons, for the maintenance of commands (instructions) for appropriate documentation etc, and to improve this system daily, as is done in the fire control of the missile troops and artillery.

At the present time an unceasing struggle is being waged in the missile troops and artillery to shorten the time for the preparation of nuclear strikes along the whole chain - from the commander of the missile troops of a front to the launch sites. Work on the shortening of time is carried on in all branches (napravleniye), the implementation of a series of technical decisions, the training of the personnel of staffs at all levels by systematic instruction, an increase in efficiency within each staff, especially among army generals and officers who are being brought directly to the control of fire; the equipment of working areas and of the personnel of control groups with different instruments and appliances; the setting up of special control machines; the introduction of selective communications; the use of accurate, brief, laconic commands and instructions with the use of codes which are simple to use but sufficiently reliable. The work which has been done has already yielded positive results. Thus, on one of the exercises, from the moment when the task of delivering a nuclear strike was received by the commander of the missile troops and artillery of a front (army), to the launch of a missile, from 20 to 30 minutes were used, which included the preparation of the missile for firing.

However, at present, a shortening of time has been achieved in only one portion of the whole system of control. Unfortunately, 2 to 3 times as long was used for its other portion -- from the moment of detection of the target by reconnaissance to the making of a decision by the commander of the troops of a front (army).

Consequently, it is necessary to turn our attention to coordination of the whole system of control beginning from the staff of a front (army) and ending with the immediate ex-

ecutors. An assessment of the operation of this system must be considered as an important element in the overall assessment of the training of the staffs of fronts, armies and divisions. It would be quite reasonable, in the near future, to develop a special manual or instruction on the operation of this system and a special complex of typical missions to test the ability of staffs to carry out effective combat with the enemy's nuclear means.

Such, in the main, are the problems of the organization of combat with nuclear means which, in our opinion, must be resolved by the missile troops and artillery.

We also consider it necessary to dwell briefly on the problems of other arms of troops in combat with nuclear means, since the missile troops and artillery carry on this combat in close coordination with them, in the first place with aviation, and with the tank and airborne troops.

An important role in the combat with the enemy's nuclear means must be played by aircraft, whose advantage lies in its ability to carry on the struggle with nuclear means which are on the move most effectively. In the course of an operation, the enemy's nuclear means, like our missile units and subunits, will be on the move for 30 to 50 percent of the time, not only at night, but also in the daytime, when aircraft can operate most successfully. Furthermore, it is necessary to bear in mind, that during a period of movement the enemy's nuclear means can be detected considerably more quickly than they can in well-camouflaged siting areas or build-up areas. In these periods, aviation must display its maximum powers in the combat with the enemy's nuclear means.

The weaknesses of aviation are its dependence on meteorological conditions and its vulnerability to the enemy's antiair defenses. With proper organizational coordination between missile troops and aviation, one can use the advantages of <u>each</u> of these means, taking account of and minimizing their shortcomings.

The antiair defense troops of the ground troops should also be used in the overall system of combat with nuclear means. First of all, they can destroy the aircraft of the enemy's reconnaissance aviation. The main task of the antiair defense troops will be the destruction of delivery aircraft for nuclear bombs and cruise missiles. The question of the development of complexes which would be able to carry on the combat with the enemy's missiles in their flight trajectory already exists. These complexes are an important means for combat with the enemy's nuclear weapons.

Besides the missile troops, artillery, aviation, and antiair defense troops, other forces and means which are under the orders of a front and an army, -tank and airborne troops, diversionary-reconnaissance groups and radio-technical means - should be drawn into the combat with the enemy's nuclear means.

The experience of the Second World War shows that during actions in the operational areas, tank troops frequently destroyed the enemy's artillery on the march or in build-up areas, seized or destroyed munitions depots, etc. In a modern war there will be considerably more opportunities for actions by tank troops in the enemy's operational rear. In all cases, one of the missions of the tank troops should be the destruction of the enemy's nuclear means.

In the course of combat operations, tank troops may carry on the fight with atomic artillery, guided missiles, and free rockets at sites, in build-up areas and on the march, destroying both personnel and materiel in the process. Operating in the operational rear, tanks are also capable of disrupting the support system of special types of weapons, of destroying depots, command posts and others.

For combat with the enemy's nuclear means it is also necessary to use airborne troops. Surely, in a modern operation, together with the seizure of individual areas

or bases of operations, a no less important task will very likely be the seizure and destruction of the enemy's nuclear means, particularly of depots for special types of armament, of subunits of "Redstone", "Sergeant" and "Corporal" guided missiles, and others. In the planning of an operation, the actions by airborne troops, assigned to combat with the enemy's nuclear means, should be integrated with the operations of other means of destruction and in the first instance, with the operations of the missile troops, of aviation, and of tanks.

The operations of diversionary-reconnaissance groups can be of definite significance in the combat with the enemy's nuclear means. These groups can operate with particular success along the routes for the supply of missiles and nuclear charges from depots and assembly bases to units and subunits. Operating from ambush or making raids on the transports carrying missiles or nuclear charges, diversionary-reconnaissance groups can inflict considerable damage. An attack by diversionary-reconnaissance groups on a position of the enemy's nuclear means is also entirely feasible. Here it is expedient to attack the most vulnerable elements of a combat formation, on which the combat effectiveness of the whole unit or subunit is dependent. For example, in a "Corporal" battery, it is sufficient to knock the radar guidance station out of action, and the battery will be unable to undertake the launching of a missile.

Finally, radio-technical means should be widely used in the combat with the enemy's nuclear means. They can be employed for this purpose in two ways: for intelligence on the enemy's radio-technical means and for the creation of interference in the operation of the enemy's radio and radar apparatus. By the skilful use of radio-technical means, in combination with other means for reconnaissance and destruction, one can achieve sufficiently effective results.

Only some of the questions of combat with the enemy's nuclear means have been touched upon in the present article. Since this struggle is a most important problem, its solution calls for great efforts by all arms of troops and, in the first instance, by the missile troops, aviation, and artillery. The military academies, the scientific-research institutes, and the troops must join in to solve this problem. Only by their common efforts can it be resolved in the shortest periods of time.